

TAPERED SHAPES

CONICAL SHAPED PARTS

Grotnes Expanders are widely used to form and size conical parts from blanks including, tubing, pipe or coiled and welded sheet metal. Parts are rollformed to acquire the conical shape, then calibrated on a Grotnes Expander to get the inner diameter to tight tolerances. For example, calibrating and/or forming components with a conical shape for the Aerospace Industry.

APPLICATIONS

Some applications require special formed conical shaped parts with precise tolerances. Industries include Aerospace, Defense, Wind Energy, Nuclear and Offshore Petroleum Industry, where high quality parts with tight tolerances are required.

BENEFITS

- Expansion is a highly accurate and repeatable forming process with a shorter cycle time than comparable forming techniques.
- Grotnes Expanders make it possible to size and form profiles in a wide range of materials.
- By using a Grotnes Expander less material is needed and the machining time is dramatically reduced, also there is virtually no limit to the materials that can be formed or sized.

FEATURES

- Wide range of sizes and configurations
- Position Control System
- Gauge Mode
- User Friendly touch screen interface
- Automatic Lubrication System
- Optional Collapsible outer dies
- Optional heated dies and water-cooled jaws
- Automatic Loading and Unloading





CONICAL SHAPED PARTS



7-HE-35-9

A 35 ton push type hydraulic Expander. This Expander sizes parts for defense applications. The tilted position of the Expander provides easy loading and un-loading of the parts.

8-HE-55-12

A 55 ton push type hydraulic Expander. This Expander is used for sizing Aerospace components. Extra features include the specific form of tooling. The yellow cap is designed to hold the segments in place.



RANGE OF EXPANDING SPECIFICATIONS

- Tonnage: Less than 2 ton to over 4,000ton
- Diameters: 25mm to over 8M
- Height: 6mm to over 5M
- Wall Thickness: 1.5mm to over 305mm
- Materials: Steel, Aluminum, Nickel-based Aerospace Alloys, Titanium, Stainless Steel, etc.
- Hot or Cold Forming

